IN THE ABSTRACT:

Kindly delete the current abstract and substitute the following on a separate page.

ABSTRACT:

Cells are engineered to stably or transiently express T1R1 and T1R3 polypeptides, desirably in association with a G protein. The resultant heteromeric taste receptor is a umami taste receptor and responds to umami taste stimuli such as monosodium glutamate. The invention provides a preferred mammalian cell lines, e.g., HEK-293 cells that stably express T1R1/T1R3 and $G_{\alpha 15}$ under inducible conditions. These cells are useful in cell-based assays for identifying compounds that elicit or modulate umami taste.